

REMARKS

Claims 1 and 5 are amended. Claims 41-53 are added. Claims 1-11 and 41-53 are in the application for consideration.

The claims have been amended to change reference to "titanium silicide comprising layer" to the more grammatically correct "titanium silicide-comprising layer". Such does not go to patentability, and no change in scope occurs thereby.

Independent claim 1 stands rejected as being anticipated by U.S. Patent No. 6,404,058 to Taguwa. Claim 1 has been amended to recite that the titanium silicide-comprising layer is plasma enhanced chemical vapor deposited onto a conductively doped silicon surface on the substrate. Support for the same is inherent from Applicant's specification as-filed such that no new matter is added thereby. Specifically for example, Applicant's Background section clearly defines prior art processing which motivated the invention as being relative to depositing titanium silicide onto conductively doped silicon regions, and that the invention was principally motivated towards overcoming issues associated therewith. (p.1-p.4).

Taguwa's flowing of TiCl_4 upon which the Examiner relies at col.5, Ins.9-17 is clearly in the deposition of an elemental titanium layer, and then onto which titanium silicide is deposited at col.5, Ins.18-29. Accordingly, the Taguwa teaching is clearly only in the context of initial TiCl_4 feed in the absence of silane to deposit a titanium layer, not a titanium silicide layer,

followed immediately by deposition of titanium silicide on that titanium layer. Accordingly, Applicant's amended claim 1 is not anticipated by Taguwa.

Further, nothing in the Taguwa reference would remotely suggest Applicant's amended independent claim 1, as the Taguwa teaching is only in the context of forming a contacting titanium/titanium silicide composite whereby elemental titanium is deposited first. Such would in now way suggest flowing TiCl_4 in the absence of silane for deposition of titanium silicide onto (meaning in at least some direct physical contact with the immediately underlying material) a conductively doped silicon surface. For at least these reasons, Applicant's amended independent claim 1 is neither anticipated nor obvious over U.S. Patent No. 6,404,058, and accordingly should be allowed. Action to that end is requested.

Claim 5 has been rewritten into independent form. Such recites that during the first feeding of the TiCl_4 without feeding any measurable silane to the chamber, nothing other than TiCl_4 is fed to the chamber during the stated first period of time. Claim 5 stands rejected as being obvious over a combination of Taguwa and U.S. Patent No. 6,174,809 to Kang et al. However, the Examiner's rational in the last Office Action does not address Applicant's claim 5 limitation regarding nothing other than TiCl_4 being fed to the chamber during the first period of time. Taguwa clearly only discloses feeding an additional material in the form of argon (col. 5, Ins.9-11), and Kang et al. is interpreted to disclose also feeding both an inert gas and a reducing gas. Accordingly, the relied upon references in rejecting

Applicant's claim 5 both disclose feeding materials other than TiCl_4 to the chamber during the time period in question. As each reference is lacking in this regard, the combination of Kang et al. and Taguwa does not meet all the limitations of claims 5, and thereby does not render Applicant's claim 5 obvious. Accordingly, claim 5 should be allowed and action to that end is requested.

Independent claim 43 is added. Such recites that no material is deposited on the substrate from a time period starting with the first feeding until starting with the second time period. Such is clearly supported and contemplated by Applicant's specification as-filed. No statement or inference is provided in Applicant's specification that the initial feeding of TiCl_4 necessarily results in deposition of titanium or any other material on the substrate during such flowing. A person of skill in the art reviewing Applicant's specification as-filed would clearly conclude a lack of teaching of necessity of depositing material on the substrate during the initial flowing in the absence of silane. Further, the claims in the parent application speak of flow of TiCl_4 and silane in a quantity ineffective to deposit titanium silicide, and presumably any other material, on the substrate. Accordingly, the subject matter referred to above included in Applicant's independent claim 43 is clearly contemplated and supported by the specification as-filed such that no new matter is added.

Clearly, Taguwa and Kang et al. only contemplate deposition of material on the substrate during a time period in which TiCl_4 is flowed to a

chamber in the absence of silane. Accordingly, Applicant's claim 43 is neither anticipated nor obvious over either one of Kang or Taguwa whether taken alone or any combination. Accordingly, Applicant's added independent claim 43 should be allowed, and action to that end is requested.


Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art.

A Terminal Disclaimer is submitted herewith obviating the Examiner's two obviousness-type double patenting rejections.

This application is believed to be in immediate condition for allowance, and action to that end is requested.

Respectfully submitted,

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